

PATENT ABSTRACTS OF JAPAN

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(54) LIQUID CRYSTAL DISPLAY DEVICE

(57)Abstract:

PURPOSE: To relieve pressure-resistance characteristics of a driving circuit, to reduce the power consumption, to improve the signal processing speed and to decrease a display irregularity by alternately driving corresponding data lines by a 1st driving circuit which generates a positive driving voltage and a 2nd driving circuit which generates a negative driving voltage at a specific period.

CONSTITUTION: The 1st driving circuit 11 which is connected to the respective data lines 2 in common and generates the positive driving voltage and the 2nd driving circuit 12 which generates the negative driving voltage are provided as a data line driving circuit 6 which drives the data lines 2 of a liquid crystal display panel 1 at the same time according to an image signal of one horizontal scanning line. Then the 1st and 2nd driving circuits 11 and 12 drive the corresponding data lines 2 alternately at a specific period. Therefore, the 1st and 2nd driving circuits 11 and 12 only drive the corresponding data lines 2 alternately at the specific period and the output amplitude and the amplitude of the handled image signal are reduced to half. Consequently, the dielectric strength characteristics of the driving circuits are relieved, the reduction of the power consumption and the improvement of the signal processing speed are realized, and the display irregularity is reduced.

